

BRUHATH BANGALORE MAHANAGARA PALIKE

Yalahanka ELECTRICAL DIVISION

PRE MEASUREMENT BOOK

Name of work :-Annual Maintenance and repairs of street lights in ward no 06 Package Y -06 of Yelahanka Zone.

Name of Contractor of nature of Agency:-Sri Pradeep kumar S.N. Pro of M/s Ganga Enterprises

Job Code No:-006-22-000007

Ref no and Date of commencement of work:- EE/Elc/YZ/WO/000006 /22-23 Date:01/04/2022

Aggrement No & date:-

Measurement Book No:

Page No:

Bill NO :-Bill NO :- 13th RA Bill

Bill Period : 01-12-2023 to 31-12-2023 (for 1 months)

Sl. No.		Unit	Period in Months	Present Measurements		
				Qty	Tender Full Rate	Cost
1	Operation and Maintenance of street lighting system including replacement of damaged/failed/fused out components like Lamps, Tubes, Chokes, Ignitors, Capacitors, Switches , wires, Holders, Starters ,and switching ON/OFF of street lights at specified timing and Pole numbering, Preparing ward wise, street wise data bank furnishing maintenance reports ,every day etc, complete so as to ensure efficient burning of street lights detailed in tender documents for 36/40 W fluorescent tube light street lighting systems.	Each	1	79.00	34.16	2698.64
2	Operation and Maintenance of street lighting system including replacement of damaged/failed/fused out components like Lamps, Tubes, Chokes, Ignitors, Capacitors, Switches , wires, Holders, Starters ,and switching ON/OFF of street lights at specified timing and Pole numbering, Preparing ward wise, street wise data bank furnishing maintenance reports ,every day etc, complete so as to ensure efficient burning of street lights detailed in tender documents for 125 W HPMV light Park lighting systems.	Each	1	45.00	54.16	2437.20
3	Operation and Maintenance of street lighting system including replacement of damaged/failed/fused out components like Lamps, Tubes, Chokes, Ignitors, Capacitors, Switches , wires, Holders, Starters ,and switching ON/OFF of street lights at specified timing and Pole numbering, Preparing ward wise, street wise data bank furnishing maintenance reports ,every day etc, complete so as to ensure efficient burning of street lights detailed in tender documents for 250W HPSV street light lighting systems.	Each	1	4805.00	81.00	389205.00
4	Operation and Maintenance of street lighting system including replacement of damaged/failed/fused out components like Lamps, Tubes, Chokes, Ignitors, Capacitors, Switches , wires, Holders, Starters ,and switching ON/OFF of street lights at specified timing and Pole numbering, Preparing ward wise, street wise data bank furnishing maintenance reports ,every day etc, complete so as to ensure efficient burning of street lights detailed in tender documents 400 watts HPSV street light/High Mast lighting systems.	Each	1	120.00	91.66	10999.20
5	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/fused out compnents like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 24 watt LED park lighting systems.	Each	1	32.00	66.66	2133.12

CFC
Assistant Executive Engineer (Ele)
BBMP, Bangalore

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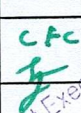
6	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/fused out compnents like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 65 watt LED street light lighting systems.	Each	1	727.00	91.66	66636.82
7	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/fused out compnents like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 90 watt LED street light lighting systems.	Each	1	19.00	108.33	2058.27
8	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/fused out compnents like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 110/120 watt LED streetlight lighting system	Each	1	0.00	125.00	0.00
9	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/fused out compnents like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 150 watt LED street light /High mast lighting system	Each	1	0.00	150.00	0.00
10	Painting of existing Street lighting pole after scraping the oid paint and painted with suitable colour enamel/silver paint including copingfloating of the polec) Up to 5 Mtrs Street light pole	Nos	-	0.00	415.00	0.00
11	Painting of existing Street lighting pole after scraping the oid paint and painted with suitable colour enamel/silver paint including copingfloating of the polec) 8 Mtr and above Street light pole	Nos	-	0.00	650.00	0.00
12	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) 100Amps 25kA.	Each	-	30.00	3850.00	115500.00

13	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop- Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets. 260mmx210mmx116mm			Each	-	30.00	1850.00	55500.00
14	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm			Mtr	-	210.00	140.00	29400.00
15	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. On wall / Structure 6 sqmm to 16 sqmm			Mtr	-	210.00	20.00	4200.00
	Pole Number	Address	nos					
	GE/06/TC/SN/00/02/12/SV	Sri Shiradi Sai Nagara 2nd Cross R.K.Hegade Nagara	1					
	GE/06/TC/SN/00/03/13/SV	Sri Shiradi Sai Nagara 3rd Cross R.K.Hegade Nagara	1					
	GE/06/TC/SN/00/01/07/SV	Sri Shiradi Sai Nagara 1st Cross R.K.Hegade Nagara	1					
	GE/06/TC/ML/00/02/02/SV	2nd Cross MCECHS Layout Shivarama Karantha Nagara	1					
	GE/06/TC/AER/02/09/SV	Apoorva Enclave main road Thanisandra	1					
	GE/06/TC/RL/00/01/02/SV	Railway men Layout 1st Cross Thanisandra	1					
	GE/06/TC/CL/01/01/LED	Sri Chamundeashwari layout K Narayanapura Main road	1					
	GE/06/TC/HN/PQ/15/TL	Inside Of Police Quatress R.K.Hegade Nagara	1					
	GE/06/TC/HN/00/07/04/SV	Sri Nagamma temple 7th Cross R.K.Hegade Nagara	1					
	GE/06/TC/RE/MR/14/SV	Royal Enclave 1st Main Rachenahalli	1					
	GE/06/TC/GTR/00/03/10/S V	Sri Ganesha Temple Road 3rd Cross Shabari Nagara HK Hegade Nagara	1					
	New Pole	Sri Ganesha Temple Road 5th Cross Shabari Nagara HK Hegade Nagara	1					
	GE/06/TC/SN/03/00/07/SV	3rd Cross Shabari Nagara HK Hegade Nagara	1					

	GE/06/TC/CMR/10/LED	Near Nagavara Sub Register Office Chanakya Nagara Main Road	1					
	GE/06/TC/RL/00/05/05/SV	Railway men Layout 5th Cross Hegade Nagara	1					
	GE/06/TC/SCE/01/00/10/S V	Shabari nagaar Extension 7th Cross, RK Hegade Nagara	1					
	GE/06/TC/SCE/01/00/14/S V	Shabari nagaar Extension 8th Cross, RK Hegade Nagara	1					
	GE/06/TC/GTR/01/00/SV	Ganesha Temple road Shabari nagaar RK Hegade Nagara	1					
	GE/06/TC/BL/00/02/05/SV/02	BDS Layout 2nd Cross Hegade Nagara	1					
	GE/06/TC/SL/01/02A/12/S V	2nd A Cross Shiradi Ratan Layout	1					
	GE/06/TC/PL/MR/29/SV	7th Cross P & T Layout Rachenahalli	1					
	GE/06/TC/PL/00/06/05/0	# 129, 6th Cross P & T Layout Rachenahalli	1					
	GE/06/TC/PL/02/00/01/TL	# 177, Sannidhi Nilaya, Rachenahalli Main road	1					
	GE/06/TC/BL/01/00/03/SV	3rd Cross Bhagyashree Layout Rachenahalli	1					
	GE/06/TC/RL/00/01/02/SV	3rd Cross Railway men Layout Thanisandra	1					
	GE/06/TC/CL/01/LED	Prashanth Nagara 2nd Cross, RK Hegade Nagara	1					
	GE/06/TC/ML/00/02/02/SV	MCECHS Layout 5th Cross	1					
	GE/06/TC/AL/06/02/04/SV	Rachenahalli main road Back side of Kariyappa building	1					
	GE/06/TC12/SMR/52/SV	Mestripalya church main road Rachenahalli	1					
	GE/06/TC/RE/00/07/02/LED	# 96, 7th Cross Royal Enclave Rachenahalli	1					
		Total	30					
	For MCCB 30 no X 6 Mtrs = 180 Mtrs							
	For Timer 7 no X 6 Mtrs = 42 Mtrs							
	Total 222 Mtrs							
16	Supply and fixing of 4 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3			Each	-	13.00	6200.00	80600.00
17	Supplying and fixing Microprocessor Based Astronomical timer Switch with using necessary bolts, nuts and washers.			Each	-	13.00	2859.00	87167.00
	Pole Number	Address	nos					
	GE/06/TC/DTP/02/LED	Bhuvaneshwari Nagara Park	1					

Assistant Executive Engineer (Elec)
B.M.W. Nagaraj

	GE/06/TC/SMR/48/SV	Rachebahhli Lake Road	1					
	GE/06/TC/RMR/34/SV	Govt School Road Thanisandra	1					
	GE/06/TC/HMR/99/SV	Hegde Nagara to Thanisandra SK Shop	1					
	New Pole	Hegde Nagara Flyover Narayanapura Cross	1					
	GE/06/TC/HN/00/03/01/SV	MCHS Layout Near Krishna Sagar Hotel	1					
	GE/06/TC377/NL/00/01/03 /TL	Nandhanavana Layout 2nd Main1st Cross	1					
	GE/06/TC/HMR/73/SV	Hegdenagara to Thanisandra main near Wood Factory	1					
	New Pole	Nagavara Ambedkar colony 1 st mai 2nd Cross	1					
	GE/06/TC/BN/00/6A/04/LE D	Bhuvaneshwari Nagara 6th A Cross	1					
	GE/06/TC/BN/02/07/07/LE D	Bhuvaneshwari Nagara 7th A Cross	1					
	GE/06/TC/DH/DMR/17/SV	Dasarahalli Main Road	1					
	GE/06/TC/DH/DMR/01/SV	Rachenahalli main road Near Nandhini Booth	1					
		Total	13					
18	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as			Each	-	15.00	623	9345.00
19	1.1 kV, LT Aerial Bunched Cable, confirming to IS-14255: 1995 XLPE insulation Parameter shall be as below 1. Hot Set Test: a) Elongation under Load: 50% (Max)b) ermanent Elongation After Cooling: 3% (Max) 2.Thermal Aging in oven:a) Tensile Strength: 16 N/mm ² (Min) b) Elongation: 375% (Min) 3. Water Absorption Test a) Water absorbed: 0.5 mg/cm ² (Max) 4. Carbon Black Content shall be ranging from 2% to 3% 3x25 + 1x25 + 1x16 Sqmm Street light (Insulated			KM		2.51	125000.00	313750.00
20	Stringing of 1.1 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size (3x95) (Phase Conductor) + (1x70) (Insulated Messenger Neutral) + (1x25) (Street Light Control)			KM		2.51	10500.00	26355.00
	Near Sri Rama temple Ashwath Nagara TO Bharath							
	GE/06/TC/TMR/55/SV/2	30 Mtrs						
	GE/06/TC/TMR/56/SV/2	30 Mtrs						
	GE/06/TC/TMR/56/SV/2	30 Mtrs						
	GE/06/TC/TMR/57/SV/2	30 Mtrs						
	GE/06/TC/TMR/58/SV/2	30 Mtrs						
	GE/06/TC/TMR/58/SV/2	30 Mtrs						
	GE/06/TC/TMR/59/SV/2	30 Mtrs						
	GE/06/TC/TMR/60/SV/2	30 Mtrs						
	GE/06/TC/TMR/60/SV/2	30 Mtrs						
	GE/06/TC/TMR/61/SV/2	30 Mtrs						
	GE/06/TC/TMR/61/SV/2	30 Mtrs						
	GE/06/TC/TMR/62/SV/2	30 Mtrs						


 Assistant Executive Engineer (M)
 BBMP, Bangalore

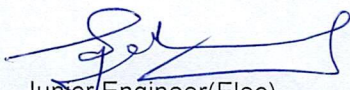
GE/06/TC/TMR/62/SV/2 GE/06/TC/TMR/63/SV/2	30 Mtrs						
GE/06/TC/TMR/63/SV/2 GE/06/TC/TMR/64/SV/2	30 Mtrs						
GE/06/TC/TMR/64/SV/2 RCC Pole Timer Box	45 Mtrs						
PART 2							
RCC Pole Timer Box GE/06/TC/TMR/64/SV/2	45 Mtrs						
GE/06/TC/TMR/64/SV/2 GE/06/TC/TMR/65/SV/2	30 Mtrs						
GE/06/TC/TMR/65/SV/2 GE/06/TC/TMR/66/SV/2	30 Mtrs						
GE/06/TC/TMR/66/SV/2 GE/06/TC/TMR/67/SV/2	30 Mtrs						
GE/06/TC/TMR/67/SV/2 GE/06/TC/TMR/68/SV/2	30 Mtrs						
GE/06/TC/TMR/68/SV/2 GE/06/TC/TMR/69/SV/2	30 Mtrs						
GE/06/TC/TMR/69/SV/2 GE/06/TC/TMR/70/SV/2	30 Mtrs						
GE/06/TC/TMR/70/SV/2 GE/06/TC/TMR/71/SV/2	30 Mtrs						
Total Mtrs	255						
Near Bharath Nagar cross TO Saraipalya cross &							
GE/06/TC/TMR/72/SV/2 GE/06/TC/TMR/73/SV/2	30 Mtrs						
GE/06/TC/TMR/73/SV/2 GE/06/TC/TMR/74/SV/2	30 Mtrs						
GE/06/TC/TMR/74/SV/2 GE/06/TC/TMR/75/SV/2	30 Mtrs						
GE/06/TC/TMR/75/SV/2 GE/06/TC/TMR/76/SV/2	30 Mtrs						
GE/06/TC/TMR/76/SV/2 GE/06/TC/TMR/77/SV/2	30 Mtrs						
GE/06/TC/TMR/77/SV/2 GE/06/TC/TMR/78/SV/2	30 Mtrs						
GE/06/TC/TMR/78/SV/2 GE/06/TC/TMR/79/SV/2	30 Mtrs						
GE/06/TC/TMR/79/SV/2 GE/06/TC/TMR/80/SV/2	30 Mtrs						
GE/06/TC/TMR/80/SV/2 RCC Pole Timer Box	45 Mtrs						
RCC Pole Timer Box GE/06/TC/TMR/80/SV/2	45 Mtrs						
GE/06/TC/TMR/80/SV/2 GE/06/TC/TMR/81/SV/2	30 Mtrs						
GE/06/TC/TMR/81/SV/2 GE/06/TC/TMR/82/SV/2	30 Mtrs						
GE/06/TC/TMR/82/SV/2 GE/06/TC/TMR/83/SV/2	30 Mtrs						
GE/06/TC/TMR/83/SV/2 GE/06/TC/TMR/84/SV/2	30 Mtrs						
GE/06/TC/TMR/84/SV/2 GE/06/TC/TMR/85/SV/2	30 Mtrs						
GE/06/TC/TMR/85/SV/2 GE/06/TC/TMR/86/SV/2	30 Mtrs						
GE/06/TC/TMR/86/SV/2 GE/06/TC/TMR/87/SV/2	30 Mtrs						
GE/06/TC/TMR/87/SV/2 GE/06/TC/TMR/88/SV/2	30 Mtrs						

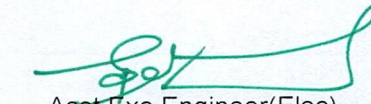
	Total Mtrs	570 Mtrs						
	PART 3							
	Veeranna Palya junction TO Mariyannana Palya							
	GE/06/TC/KMR/01/LED/4 GE/06/TC/KMR/01/LED/4	35 Mtrs						
	GE/06/TC/KMR/02/LED/4 GE/06/TC/KMR/03/LED/4	35 Mtrs						
	GE/06/TC/KMR/03/LED/4 GE/06/TC/KMR/04/LED/4	35 Mtrs						
	GE/06/TC/KMR/04/LED/4 GE/06/TC/KMR/05/LED/4	35 Mtrs						
	GE/06/TC/KMR/05/LED/4 GE/06/TC/KMR/06/LED/4	35 Mtrs						
	GE/06/TC/KMR/06/LED/4 GE/06/TC/KMR/07/LED/4	35 Mtrs						
	GE/06/TC/KMR/07/LED/4 GE/06/TC/KMR/08/LED/4	35 Mtrs						
	GE/06/TC/KMR/08/LED/4 GE/06/TC/KMR/09/LED/4	35 Mtrs						
	GE/06/TC/KMR/09/LED/4 GE/06/TC/KMR/10/LED/4	35 Mtrs						
	GE/06/TC/KMR/10/LED/4 GE/06/TC/KMR/11/LED/4	35 Mtrs						
	GE/06/TC/KMR/11/LED/4 GE/06/TC/KMR/12/LED/4	35 Mtrs						
	GE/06/TC/KMR/12/LED/4 GE/06/TC/KMR/13/LED/4	35 Mtrs						
	GE/06/TC/KMR/13/LED/4 GE/06/TC/KMR/14/LED/4	35 Mtrs						
	GE/06/TC/KMR/14/LED/4 GE/06/TC/KMR/15/LED/4	35 Mtrs						
	GE/06/TC/KMR/15/LED/4 GE/06/TC/KMR/16/LED/4	35 Mtrs						
	GE/06/TC/KMR/16/LED/4 GE/06/TC/KMR/17/LED/4	35 Mtrs						
	GE/06/TC/KMR/17/LED/4 GE/06/TC/KMR/18/LED/4	35 Mtrs						
	GE/06/TC/KMR/18/LED/4 GE/06/TC/KMR/19/LED/4	35 Mtrs						
	GE/06/TC/KMR/19/LED/4 GE/06/TC/KMR/20/LED/4	35 Mtrs						
	GE/06/TC/KMR/20/LED/4 GE/06/TC/KMR/21/LED/4 RCC pole Timer box	60 Mtrs						
	Total Mtrs	725 Mtrs						
	Thirumenahalli cross road TO RMZ cement							
	VE/05/TC/HMR/46/S VE/05/TC/HMR/45/S	30 Mtrs						
	VE/05/TC/HMR/45/S VE/05/TC/HMR/44/S	30 Mtrs						
	VE/05/TC/HMR/44/S VE/05/TC/HMR/43/S	30 Mtrs						
	VE/05/TC/HMR/43/S VE/05/TC/HMR/42/S	30 Mtrs						
	VE/05/TC/HMR/42/S VE/05/TC/HMR/41/S	30 Mtrs						

VE/05/TC/HMR/41/S	30 Mtrs						
VE/05/TC/HMR/40/S	30 Mtrs						
VE/05/TC/HMR/39/S	30 Mtrs						
VE/05/TC/HMR/38/S	30 Mtrs						
VE/05/TC/HMR/37/S	30 Mtrs						
VE/05/TC/HMR/36/S	30 Mtrs						
VE/05/TC/HMR/35/S	30 Mtrs						
VE/05/TC/HMR/34/S	30 Mtrs						
VE/05/TC/HMR/33/S	30 Mtrs						
VE/05/TC/HMR/32/S	30 Mtrs						
VE/05/TC/HMR/31/S	30 Mtrs						
Total Mtrs	450 Mtrs						
Hegade Nagara main road TO MECEHS Layout							
GE/06/TC/HMR/25/SV	30 Mtrs						
GE/06/TC/HMR/26/SV	30 Mtrs						
GE/06/TC/HMR/27/SV	30 Mtrs						
GE/06/TC/HMR/28/SV	30 Mtrs						
GE/06/TC/HMR/29/SV	30 Mtrs						
GE/06/TC/HMR/30/SV	30 Mtrs						
GE/06/TC/HMR/31/SV	30 Mtrs						
GE/06/TC/HMR/32/SV	30 Mtrs						
GE/06/TC/HMR/33/SV	30 Mtrs						
Total Mtrs	240 Mtrs						
Grand Total :2555 Mtrs							
TOTAL Rs							476168.25
Add GST 18 % = 12%+6% on item no 1-9				-0.12	57140.19		419028.06
				0.18	75425.05		494453.11
Total Rs item no 10-20							671817.00
Add GST 18 % on item no 10-18 and 20							64452.06
TOTAL Rs							1230722.17
Fine imposed for non burning of street lights For							4000.00
As per street light agreement clause 2% will be							9889.06
GRAND TOTAL							1216833.11

CERTIFICATE

- 1.This is to certify that the work done is saticefactorily.
- 2.This is to certify that the bill amount calimed in this bill does not claimed in any of the previous bill.


 Junior Engineer(Elec)
 Yalahanka Division


 Asst. Exe. Engineer(Elec)
 Yalahanka Division